

PUDOVIK, A. N.; MOSHKINA, T. M.; KHRAMTSOVA, V. P.

Diazophosphinic and hydrazediphosphinic esters. Zhur. ob.  
khim. 33 no.1:94-97 '63. (MIRA 16:1)

1. Kazanskiy filial Nauchno-issledovatel'skogo kinofetoinstituta.

(Phosphinic acid) (Diaso compounds)  
(Hydrazo compounds)

KHRAMUSHIN, A.

DANILENKO, A.; CHUMAKOV, N.; SERBINOVSKIY, G.; GRACHEV, V.; KHRAMUSHIN, A.;  
SOKOLOV, B.; BOL'SHAM, Ya.; TAYTS, A.; MEYFEL'D, M.; FRENKEI', S.;  
LYUDMIRSKIY, I.; NEBESNYI, A.; VESHENEVSKIY, S.; YERMILOV, A.;  
BROZGOL', M.; SOLOV'YEV, P.; KLYUYEV, S.; ROZENTAL', A.; SMIRNOV, V.;  
DOROFYUK, A.

Solomon Mikhailovich Livshits; obituary. Prom energ. 11 no.12:34  
D '56. (MIRA 10:1)

(Livshits, Solomon Mikhailovich, 1901-1956)

BELOV, N.N.; BOL'SHAM, Ya.M.; GORDEYEV, A.N.; GRACHEV, V.A.; YERMILOV, A.A.;  
ZAISSKIY, A.M.; KIZNETSER, Ye.N.; KNOHRING, G.M.; KONSTANTINOV,  
B.A.; KOPYTOV, N.V.; LEVIT, G.O.; MILLER, G.P.; MAYFEL'D, M.P.;  
PRINTSEV, A.A.; SERBINOVSKIY, G.V.; SOKOLOV, B.A.; STASILOYTS, A.B.;  
TAYTS, A.A.; KHRAMUSHIN, A.M.

Mikhail Konstantinovich Kharchev; obituary. Belov and others. From.  
energ. 12 no.12:33 D '57. (MIRA 10:12)  
(Kharchev, Mikhail Konstantinovich, 1896-1957)

YAKUBOVSKIY, F.B., red.; BELYAYEV, B.I., red.; VOLNYANSKIY, A.K., red.;  
KAMINSKIY, D.N., red.; KOL'TSOV, A.G., red.; KUREK, N.M., red.;  
OVSYANKIN, V.I., red.; PRIVALOV, N.M., red.; KHRAMUSHIN, A.M.,  
red.; ERISTOV, V.S., red.; UDOD, V.Ya., red.isd-va; TEMKINA,  
Ye.L., tekhn.red.

[Papers and reports of the section on industrial construction,  
assembling and specialized work of the All-Union Conference on  
Construction] Doklady i soobshcheniya. Moskva, Gos.izd-vo lit-ry  
po stroit., arkhitekt. i stroit.materialam, 1958. 438 p.

(MIRA 12:7)

1. Vsesoyuznoye soveshchaniye po stroitel'stvu. Moscow, 1958.  
Sektziya promyshlennogo stroitel'stva, montazhnykh i spetsializirovannykh rabot.

(Building)

KHRAMUSHIN, A.M.

KHRAMUSHIN, A.M., inzh.; FRENKEL', S.N., inzh.

Growth of designing and installation organizations concerned with  
the electrification of industry in the U.S.S.R. Nov. tekhn. i  
pered. op. v stroi., no.11:18-24 N '57. (MIRA 10:12)  
(Electrification)

1. YANUBOV, M.K.: KHEAMUSHINA-PUSHKAR', L.M.

2. USSR (600)

4. Oils and Fats

7. Processing and refining of soap stocks. Masl. zhir. prom. 17. no. 9. 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

KHRAMUSHINA-PUSHIKAR, L. M.

Improving the Quality of the Black Cotton Soap Stock with a Concentrated  
Base. Leka Promishlenost (Light Industry), #7-12:28:July-Dec 1955

USSR.

Refining of black cottonseed soap stock with concentrated  
lye. M. K. Yakubov and L. M. Khramushina-Pushkar  
(Polytech. Inst., Kharkov). *Kharkovskaya Zhurn. Prikl. Khim.*  
20, No. 3, 14-16(1955).--Black cottonseed soap stock  
contg. 30-40% fatty acids is mixed with 40-60% soln. of  
NaOH (20% in excess of the amt. required to saponify the  
neutral fat) and then heated to 170-250°. The authors  
claim that palmitic and acetic acids are formed from oleic,  
as in the Varentrop's reaction (KOH), and that the resulting  
soap is hard and light in color. Vladimir N. Krukovsky.



BALAKIN, Ye.D.; MUKHANOV, G.V.; MURVANIDZE, D.S., red.; KHRAMYKH,  
N.M., red.; BRODSKIY, V.S., tekhn. red.

[Topics for inventors and efficiency promoters in the shoe  
industry] Temnik dlia izobretatelei i ratsionalizatorov obuv-  
noi promyshlennosti. Moskva, Biuro tekhn. informatsii leg-  
koi promyshl., 1959. 95 p. (MIRA 15:11)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy nauchno-tekhnicheskii  
komitet.

(Shoe manufacture--Technological innovations)

KHAMRAEYEV, I.Kh.; KHRAMYSHKIN, P.V.; RAKHMATULAYEV, Kh.R.; RUZMATOV, S.R.

Geological and geochemical correlation of pyrite manifestations  
in the central Kyzyl Kum with some pyrite deposits in the Southern  
Urals. Uzb. geol. zhur. 8 no.4:19-29 '64.

(MIRA 18:5)

1. Institut geologii i geofiziki imeni Abdullayeva AN UzSSR.

KHRANIKOV, P.I., inzhener

Burning cut peat. Tekst.prom.8 no.2:40-42 P '48. (MIRA 8:11)  
(Peat)

KHRAMILOV, P. I.

36242

Progressivnyye normy raskhoda para (Na suashku osnory). Tekstil. prom-st',  
1949, No. 11, s. 40-41

SO: Letopis' Zhurnal'nykh Statey, No. 49, 1949

KHRANILOV, P.I.

Evaluation of the economic aspects of drying apparatus.

Izv. vys. ucheb. zav.; tekhn. tekst. prom. no. 4: 116-121

'63.

(MIRA 16:11)

1. Ivanovskiy tekstil'nyy institut imeni M.V. Frunze.

KHRANILOV, P.I.

KHRANILOV, P.I., inzhener.

Increasing the productivity of drying apparatus. Tekst.prom. 14  
no.5:36-39 My '54. (MIRA 7:6)  
(Drying apparatus)

KHRANILOV, P.I.

Secondary power sources of finishing plants. Tekst.prom. 14 no.9:  
36-37 S '54. (MLBA 7:11)  
(Textile finishing)

KHRANILOV, P.I.; RAGOZINA, N.M.; SMIRNOVA, F.K.

Drying of fabrics under longitudinal blowing by the drying agent  
at high velocities. Izv.vys.ucheb.zav.; tekhn.tekhn.prom. no.1:  
134-138 '62. (MIRA 15:3)

1. Ivanovskiy tekstil'nyy institut im. M.V.Frunze.  
(Textile fabrics--Drying)



KHRANILOV, P.I.

Drying of fabrics by means of cold air. Izv.vys.ucheb.zav.;  
tekh.tekst.prom. no.2:139-142 '63. (MIRA 16:6)

1. Ivanovskiy tekstil'nyy institut imeni M.V.Frunze.  
(Textile fabrics—Drying)

KHEBANISOV, T.I.; DROZDIN, E.M.

Intensification of the drying of fabrics by the speed increase  
of the blower. izv. vys. ucheb. zav.; tekhn. teks. prom. no.3:  
123-129 '64. (MIRA 17:10)

1. Ivanovskiy tekstil'nyy institut imeni Frunze.

KHRANILOV, P.I., dotsent

Cases when gas dryers are more economical than steam dryers.

Tekst.prom. 25 no.1:83-84 Ja '65.

(MIRA 1964)

1. Ivanovskiy tekstil'nyy institut.

L 06341-67 EWT(m)/EWP(t)/ETI IJP(c) JH/MJW/JD/JG/WB

ACC NR: AP6030322

(A)

SOURCE CODE: UR/0153/66/009/003/0449/0452

AUTHOR: Khranilov, Yu. P.; Poroykova, V. S.

ORG: Department of Technology of Electrochemical Manufactures, Ivanovo Chemical Engineering Institute (Kafedra tekhnologii elektrokhimicheskikh proizvodstv, Ivanovskiy khimiko-tekhnologicheskii institut)

TITLE: Corrosion and anodic behavior of Mg-Al-Li alloys in concentrated sulfuric acid

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 9, no. 3, 1966, 449-452

TOPIC TAGS: corrosion, magnesium alloy, aluminum alloy, lithium alloy, SULFURIC ACID, ELECTRIC POTENTIAL

ABSTRACT: The purpose of the study was to determine whether the introduction of certain amounts of aluminum into a magnesium-lithium alloy would make its potential more electronegative in concentrated sulfuric acid (20-26 N H<sub>2</sub>SO<sub>4</sub>). The alloys were prepared from Mg-1 magnesium, AV-000 aluminum and LE-1 lithium, cast in a cylindrical mold, and subjected to homogenizing annealing in nitrogen for 40 hr at 300°C. The introduction of 1-5% Al into the Mg-Li alloy was found to raise the negative potential sharply, as expected. This alloy can therefore be used as the anodic material in activated chemical sources of current with lead dioxide cathodes. Most interesting are Mg-base alloys containing 5-6% aluminum and 10-17% lithium, which have a high negative

Card 1/2

UDC: 669.721.5\*71\*884:620.193.41

L 06341-67

ACC NR: AP6030322

potential and a low corrosion rate. Orig. art. has: 1 figure and 2 tables. 6

SUB CODE: 11,07/ SUBM DATE: 18Jul64/ ORIG REF: 004

Card 2/2 h28

L 21127-65 EST(m)/EPT(n(-2/DNA(d)/EPT(t)/EPR/EWP(b) Ps-l/Pu-l IJP(c) JD/  
JG/WB

ACCESSION NR: AP5001755

S/0153/64/007/005/0810/0815

AUTHOR: Poroykova, V. S.; Khranilov, Yu. P.; Sokolova, A. G.

TITLE: Corrosion resistance and anodic behavior of Mg-Li alloys in concentrated sulfuric-acid solutions B  
27 21

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 7, no. 5, 1964, 810-815

TOPIC TAGS: magnesium alloy, lithium containing alloy, alloy micro-hardness, alloy corrosion resistance, alloy polarization, alloy potential  
16

ABSTRACT: Magnesium-lithium alloys containing up to 20% lithium have been studied. The microhardness of the alloy increased with increasing lithium content in  $\alpha$ -solid solution but dropped with the appearance of the  $\beta$ -phase. Resistivity continuously increased with increasing lithium content, first sharply and then more slowly. The atmospheric corrosion resistance of alloys containing up to 1.26% lithium was found to be somewhat higher than that of unalloyed magnesium, but at

Card 1/3

L 21127-65

ACCESSION NR: AP5001755

higher lithium content corrosion resistance drops. All the alloys corroded heavily in  $H_2SO_4$  solutions, but more so in solutions with a medium concentration than in 18—26-N solutions. In 18-N sulfuric acid,  $\alpha$ -alloys have the highest electrode potential, close to that of magnesium, but they polarize less than magnesium. Alloys of the  $\alpha+\beta$ -region have 0.1—0.15 v more negative potential than that of  $\alpha$ -alloys and are polarized at higher current density. The  $\beta$ -alloys have an even more negative potential, ranging from -1.4 to -1.55 v, but are easily polarized. After a certain period, potentials of all alloys attain a steady value which is maintained for a considerable time (up to 60 min). The potential height depends upon the kinetics of formation of oxide film on the surface of alloys, which in turn depends on the number of cathodic and anodic areas on the surface. It is noted that all the alloys including magnesium have a positive differential effect in concentrated sulfuric acid. Orig. art. has: 7 figures.

ASSOCIATION: Ivanovskiy khimiko-tekhnologicheskii institut (Ivanov Chemical Technological Institute)

Card 2/3

L 21127-65

ACCESSION NR: AP5001755

SUBMITTED: 31Aug63

ENCL: 00

SUB CODE: HM, GC

NO REF SOV: 004

OTHER: 001

ATD PRESS: 3165

Card 3/3



TURNOV, B.S.; VINOGRADOV, P.A.; DOLGOPLOSK, B.A.; KHRANINA, Ye.N.; KOSTINA, S.I.

Effect of ethers on the chain structure in the stereospecific polymerization of butadiene. Dokl. AN SSSR 146 no.5:1141-1142 0 '62.

(MIRA 15:10)

1. Yaroslavskiy zavod sinteticheskogo kauchuka. 2. Chlen-korrespondent AN SSSR (for Dolgoplosk).  
(Ethers) (Butadiene) (Polymerization)

KHRANOV, K., k.t.n. inzh.; DRAGUNCHEV, K., khimik; PASHOV, P.

Purification of natural water from manganese under semioperational conditions. Khidrotekh i melior 8 no.3:90-92 '63.

Khidrotakh, k t.s. izdaniya T.S. Khidrotakh, Tsachko, inzn.

Struma River, and pollution of its water. Khidrotakh i melior  
no. 8-331-234 '64.

KHRANOV, L.S., professor.

Automatic leveling instrument. Nauka i zhizn' 24 no.3:  
55 Mr '57.

(Leveling)

(MLRA 10:5)

KHRANOV, I.S.,prof.; PRESNYAKOV, A.

Midget calculating machines. Nauka i zhizn' 26 no.2:73 P '59.  
(MIRA 12:2)

(Calculating machines)

KHRANOVA, A.

~~Etiology of endemic goiter.~~ Izv. med. inst., Sofia 8:115-144 1953.  
(GML 25:5)

1. Doctor.

KHRANOVA, A.

Studies on the effect of carbon dioxide in water and of humidity on development of experimental goiter in rats. Izv. med. inst., Sofia 8:159-170 1953. (CML 25:5)

1. Doctor. 2. Study made with the collaboration of Prof. Dr. Mosko Moskov, for histology and Mariya Andreycheva Vankova for chemistry.

KHRANOVA, A.

Influence of food with a large quantity of cooking salt (NaCl) and sugar on the conditioned reflex action in rats. Izv biol med. BAN 3 no.2:31-39 '59. (EEAI 10:4)

1. Institut po eksperimentalna meditsina pri Bulgarskata akademija na naukite.

(FOOD)

(SALT)

(SUGAR)

(CONDITIONED RESPONSE)



KHRANOVA, A.

(4)  
Sofia, Dzhelozh Bolgariyski Mladinski Vestnik, Vol. 12, No. 2, 1951 (continued)

24. The Influence of Leninism on the Development of Agricultural Science in Bulgaria. A. Khranova, M. Khranova and A. Khranova (in Russian with French summary); pp. 121-123.

25. The Influence of a Bulgarian and Soviet Union on the Progress in the Field of Various Arts. A. Khranova (in Russian with German summary); pp. 123-124.

- 1/3 -

KHRANOVA, A.; MOSKOV, M.; VASILEV, I.

The white cheese as preventive means against the development of goiter in rats. Doklady BAN 14 no.6:655-658 '61.

1. Institut fiziologii Bolgarskoy Akademii nauk. Predstavlene akad. D. Orakhovats.

KHRANOVA, A.

The influence of table salt and sugar in the diet on the blood pressure of rats of different ages. Doklady BAN 14 no.4:425-428 '61.

1. Institut fiziologii Bolgarskoy Akademii nauk. Predstavleno akad. D. Orakhovats.

+

KHRANOVA, A.; MOSKOV, M.; VASILEV, I.

Influence of the food for the development of experimental  
goiter in rats. Doklady BAN 14 no.4:421-424 '61.

1. Predstavleno akad. D. Orakhovats.

KHRANOVA, A.

Effect of diets rich in kitchen salt (NaCl) and alternatively in  
kitchen salt and sugar on blood pressure in various age groups. II.  
Izv. inst. fiziol. 5:119-132 '62.

(SODIUM CHLORIDE nutrition & diets)  
(CARBOHYDRATES nutrition & diets)  
(BLOOD PRESSURE) (AGING)

KHRANOVA, A.; TSANKOVA, E.

Importance of vitamins B1 and C for preservation of normal blood pressure following higher nervous activity excitation in rats.  
Dokl. bolg. akad. nauk 15 no.6:661-664 '62.

1. Predstavleno akad. B. ~~TSANKOVA~~  
(THIAMINE) (ASCORBIC ACID) (CENTRAL NERVOUS SYSTEM)  
(BLOOD PRESSURE) (STRESS)

KHRANOVA, A.; TSANKOVA, E.

Effect of overstraining of higher nervous activity on blood pressure in the rat with dietary addition of kitchen salt (NaCl) and resp. vitamins. Izv. inst. fiziol. (Sofia) 6: 115-122 '63.

(BLOOD PRESSURE) (ASCORBIC ACID)  
(THIAMINE) (PHARMACOLOGY) (SODIUM CHLORIDE)  
(CENTRAL NERVOUS SYSTEM) (PHYSIOLOGY)  
(STRESS)

ORAKHOVATS, D. [deceased]; KHRANOVA, A.; TSANKOVA, E.

The importance of diets with special reference to the content of proteins (animal and vegetable) and vitamins in circulatory dynamics (blood pressure) in rats exposed to overstraining of higher nervous activity. Izv. Inst. fiziol. (Sofia) 7:81-94 '64.



OPAKHOVATS, D. [deceased]; KIRANOVA, A.

The importance of diets with special reference to the content of proteins (animal and vegetable) and vitamins in circulatory dynamics (blood pressure) in rats exposed to overstraining of higher nervous activity. II. Izv. Inst. fiziol. (Sofia) 7: 95-115 '64.

KHRANOVA, A.

Effect of foods rich in eggs boiled during various periods on the blood pressure in rats with overstrained higher nervous activity and fed diets with and without vitamin C. Izv. inst. fiziol. (Sofia) 8:49-58 '64

Effect of vitamin C on the blood pressure in protein-deficient rats with overstrained higher nervous activity. Ibid. 8:9-67

KHRANOVA, V. N.

V. N. Khranova and A. P. Kreshkov, "Raising the Cement Frost-resisting Properties."

Report presented at the Second All-Union Conference on the Chemistry and Practical Application of Silicon-Organic Compounds held in Leningrad from 25-27 September 1958.  
Zhurnal prikladnoy khimii, 1959, Nr 1, pp 238-240 (USSR)

ALEKSEYEV, A.P., otv. red.; ADROV, M.M., spets. red.; KONSTANTINOV, K.G., spets. red.; KUTAKOV, B.G., red.; MASLOV, N.A., red.; MINDER, L.P., red.; NIKOL'SKIY, L.S., red.; STAROVOYTOV, P.A., red.; SURKOV, S.S., red.; KHRANOVSKIY, A.Yu., red.; YUDANOV, I.G., red.; VOROB'YEV, A.T., red.

[Materials of the session of the Scientific Council of the Arctic Scientific Research Institute of Marine Fisheries and Oceanography dealing with the results of research in 1962-1963] Materialy sessii Uchenogo soveta PINRO po rezul'tatam issledovaniy v 1962-1963 gg. Murmansk, 1964. 237 p.  
(MIRA 18:1)

1. Murmansk. Polyarnyy nauchno-issledovatel'skiy i proyektnyy institut morskogo rybnogo khozyaystva i okeanografii.
2. Direktor Polyarnogo nauchno-issledovatel'skogo i proyekt-nogo instituta morskogo rybnogo khozyaystva i okeanografii, Murmansk (for Alekseyev).
3. Laboratoriya vosproizvodstva Polyarnogo Nauchno-issledovatel'skogo i proyekt-nogo instituta morskogo rybnogo khozyaystva i okeanografii, Murmansk (for Surkov).
4. Laboratoriya tekhniki promyshlennogo rybolovstva Polyarnogo nauchno-issledovatel'skogo i proyekt-nogo instituta morskogo rybnogo khozyaystva i okeanografii, Murmansk (for Starovoytov).

KHRANOVSKIY, P.A.

4696 Kravchenko, N.A., Kravets, GKI, Khranovskiy, P.A. Iskusstvennyy  
otbor zhivotnykh. Posobiye dlya uchiteley. Kiyev, u rad. Shkola", 1954.  
160 s. s ill. 23 sm. 5000 ekz. 3 r 90k V per.- NA Ukr Yez.- (54-58283) 636.082

SO: Letopis' Zhurnal nyph Statey, Vol 7, 1949

KHRANOVSKIIY, P.A.

Practice in developing methods for the homogeneous transplantation  
of sexual glands in domesticated water fowl. Nauk.zap.Kiev.un. 13 no.  
6:111-122 '54. (MLBA 9:10)

(Generative organs--Transplantation)  
(Water birds)

**KHRANOVSKIY, P.A.**

Importance of the size variability of the sexual glands in selecting  
breeds of domestic fowl. Dokl. AN SSSR 104 no.3:482-484 S '55.

(MIRA 9:2)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G. Shevchenko;  
Predstavleno akademikom Ye. M., Pavlovskim.  
(Poultry breeding)

USSR/Farm Animals. Domestic Birds

Q-5

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 50105

Author : ~~Khranovskiy P.A.~~

Inst : University of Kiev

Title : Some Data on Size Variability of Sex Glands in Geese

Orig Pub : Nauk. zap. Kiivs'k. un-t, 1956, 15, No 11, 75-81

Abstract : In 1953, the author collected some data on the correlation between the size of sex glands in local breed geese and fertility. Subsequently, 700 birds were examined, whereby surgical methods (laparotomy) were used. The length and width of testes and ovaries in geese of various breeds (Barkov, Ramen, and Chinese) were measured. Size variabilities found in sex organs of geese whose breeds were compared here, were diverse. It was established that the variability in the size of testes is less pronounced. It was also found that testes in geese of Chinese breeds are larger, a fact which explains the higher fertility and greater sex activity of ganders of these breeds. The obtained

Card : 1/2

USSR/Farm Animals. Domestic Birds

Q-5

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 50105

data prove that a direct correlation exists between the size of sex organs and their functions. -- A.P. Chmutova

Card : 2/2



KHRANOVSKIY, P.A. [Khranovs'kyi, P.A.]

Morphological characteristics of the structure of the tail and  
new theories of the evolution of sexual asymmetry in birds.  
Visnyk Kyiv.un. no.1. Ser.biol. no.2:113-121 '58.

(MIRA 16:4)

(SYMMETRY (BIOLOGY))

(TAIL)

(BIRDS--ANATOMY)

AUTHOR: Khrenovskiy, P.A. SOV/20-121-6-38/45

TITLE: On the Inheritance of Size and Function of the Reproductive Glands in Fowl (O nasledovanii razmerov i funktsii polovykh zhelez u domashnikh ptits)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 121, Nr 6, pp 1083 - 1085 (USSR)

ABSTRACT: At the moment scientists deal in genetics and selection of animals with the investigation of the regularities which determine variability and inheritance of the physical features. Almost all vital functions which determine the fundamental productive properties of animals are, however, connected with the inner organs and systems. In selection the investigations of the latter are, it is true, less useful. Nevertheless, this problem was already at issue at the beginning of our century (Refs 1-3). Also the first investigations of the inner organs were carried out (Refs 8-11). Publications reveal that inspite of the rapid development of research technique the selection methods for the breeding of domestic animals have to be completed. Since 1953 the author has investigated the domestic goose with respect to the problem mentioned in the title; as we know this type of

Card 1/3

On the Inheritance of Size and Function of the  
Reproductive Glands in Fowl

SOV/20-121-6-38/45

animals still has a low index of fertility and of sexual precocity. In 4 generations (until 1957) 4000 geese have been investigated. Every year young ganders had to undergo laparotomy; they were selected according to the degree of development of their sexual glands. The selection amounted from 5-10%. Thus the scientists succeeded in lengthening the sexual gland for 14,2 - 30 %. A detailed analysis showed that as a result of selection in a great part of the ganders of the  $F_3$  generation considerable shifts in the transition of the glands to the active physiological state set in: In 1953 among more than 500 ganders aged 3,5 - 4 months there was not a single animal with physiologically active glands whereas among the  $F_3$  birds (1956) there were up to 15 %. During the highest sexual activity the ganders had 30 % larger testicles than the control birds. The physiological changes with respect to fertility and sexual precocity corresponded to this: In 1954 there were 21 % more fertilized eggs than in the groups of negative selection. The sexual desire was observed already earlier. The female offspring in further generations laid eggs for the second time in summer. The total amount of eggs was

Card 2/3

On the Inheritance of Size and Function of the  
Reproductive Glands in Fowl

SOV/20-121-6-38/45

39 - 71 % higher. There are 11 references, 10 of which are Soviet.

ASSOCIATION: Kiyevskiy gosudarstvennyy universitet im. T.G. Shevchenko (Kiyev  
State University imeni T.G. Shevchenko)

PRESENTED: April 25, 1958, by Ye.N. Pavlovskiy, Member, Academy of Sciences,  
USSR

SUBMITTED: September 18, 1957

Card 3/3

KHRANOVSKIY, P.A.

Morphological features of the tail structure and new hypotheses  
of the evolution of sexual asymmetry in birds. Zool.zhur. 38  
no.12:1897-1899 D '59. (MIRA 13:5)

1. Kiev State University.  
(Tail) (Generative organs) (Birds--Anatomy)

KHRANOVSKIY, P.A. [Khranovs'kyi, P.A.]

Sex, age and seasonal variations in the amount of erythrocytes  
of domestic birds. Visnyk Kyiv. un. no. 5. Ser. biol. No.1:  
88-97 '62. (MIRA 16:5)

(POULTRY—PHYSIOLOGY) (ERYTHROCYTES)

KHRAPACH, D. B.

Individual differences in the demand for vitamin B<sub>1</sub>. I. The magnitude of the individual differences in the demand for vitamin B<sub>1</sub> among white rats. B. M. Maslupikova and D. B. Khrapach (Nutrition Inst., Acad. Med. Sci. U.S.S.R., Moscow). *Voprasy Pitaniya* 15, No. 6, 8-12 (1966).—White rats were fed a vitamin B<sub>1</sub> (I)-deficient diet followed by the defn. of the excreted vitamin C (II) in the urine. Deficiency of I caused gradual disappearance of II in the urine; when the excretion of II ceased entirely, I was added to the diet in the amt. necessary to restore the excretion of II in each of the 17 exptl. rats. The results indicate that the demand for I among individual rats to restore the excretion of II fluctuates between 5 and 75 γ/animal. Increase in the body wt. was usually observed with the restoration of the excretion of II or a few days earlier. The demand for I depends on metabolic activities and some special features of the higher nerve system among single animals. B. W.

2

laboratorii izucheniya vitaminov

GRINBERG, Ye.A., dotsent; BABIY, Z.N.; LADUBA, T.L.; KHRAPACH, D.B.

Procurement of preserved blood in accomodations without special  
equipment. Vrach. delo no.4:72-77 Ap'63. (MIRA 16:7)

1. Kiyevskiy nauchno-issledovatel'skiy institut perelivaniya  
krovi i neotlozhnoy khirurgii (nauchnyy rukovoditel' instituta-  
prof. A.G.Karavanov).

(BLOOD—COLLECTION AND PRESERVATION)



KHRAPACH, G.K.

Conversion of a turbocharged four-stroke engine from liquid to  
mixed fuel. Energ. biul. no.11:14-17 N '56. (MLRA 9:12)  
(Gas and oil engines) (Fuel)

KHRAPACH, Grigoriy Kuz'mich; MALYUKOV, G.A., red.; RASTOVA, G.V.,  
ved. red.

[Installation and repair of compressors] Montazh i remont  
kompessorov. Moskva, Izd-vo "Nedra," 1964. 479 p.  
(MIRA 17:5)

KHRAPACH, G.K., inzh. (Kiyev)

The UKP20-60 transportable compressor installation for testing pipelines. Stroil. prod. neft. prom. 3 no.2:25-26 F '58.

(MIRA 11:4)

(Pipelines--Testing)  
(Compressors)

~~KHRAPACH, Grigoriy Kuz'mich; MARTYNOVA, M.P., vedushchiy red.;~~  
~~POLOSINA, A.S., tekhn.red.~~

[Compression plant operator; a manual] Mashinist kompressornoj  
stantsii; spravocnoe rukovodstvo. Moskva, Gos.nauchno-tekhn.  
izd-vo neft. i gorno-teplivnoi lit-ry, 1959. 307 p. (MIRA 12:9)  
(Compressors)

ZAPARA, S.A., kand.tekhn.nauk; PANOV, V.A., inzh.; KHRAPACH, V.G., inzh.

Truck transportation in building Krivoy Rog Basin pits. Shakht.  
stroi. 7 no.7:11-13 J1 '63. (MIRA 16:10)

1. Nauchno-issledovatel'skiy gornorudnyy institut.

ZAPARA, S.A.; METS, Yu.S.; KHRAPACH, V.G.

Short-delay blasting and ways of increasing its efficiency in a  
pit of the Krivoy Rog Southern Mining and Ore-dressing Combine.  
Sbor. nauch. trud. NIGRI no.7:39-46 '60. (MIRA 14:12)  
(Krivoy Rog Basin—Blasting)

KOMARISTOV, V.Ye., kand. tekhn. nauk, dots.; AVTUKHOV, I.V.,  
kand. tekhn. nauk, dots.; DUNAY, N.F., kand. sel'khoz.  
nauk, dots.; KHRAPACH, Ye.I., kand. tekhn. nauk;  
PESTRYAKOV, A.I., red.

[Agricultural machines and implements] Sel'skokhoziai-  
stvennyye mashiny i orudiia. [By] V.E.Komaristov i dr.  
Moskva, Kolos, 1964. 474 p. (MIRA 17:12)

KHRAPACH, Ye.I., inzhener.

Effect of certain factors on the friction coefficient of straw  
products. Sel'khoz mashina no.8:5-7 Ag '57. (MLRA 10:8)

1.Khar'kovskiy politekhnicheskij institut imeni V.I. Lenina.  
(Straw)



KHRAPACH, Ye.I., insh.

Calculating the strength of bale chambers in hay balers. Trakt. 1  
sel'khoz mash. no.1:19-22 Ja '58. (MIRA 11:4)

1.Khar'kovskiy politekhnicheskii institut imeni V.I. Lenina.  
(Hay--Harvesting)  
(Agricultural machinery)

KHAYKIS, L., kand.tekhn.nauk; KHRAPACHEV, N., inzh.

Buckets with solid cutting lips. Stroitel' no.7:20 J1 '59.  
(MIRA 12:10)  
(Excavating machinery--Equipment and supplies)

KHAYKIS, L.B., kand.tekhn.nauk; KHRAPACHEV, N.N., inzh.

Repairing dippers with semicircular cutting edges. Transp.  
stroil. 10 no.7:29-32 J1 '60. (MIRA 13:7)  
(Excavating machinery—Maintenance and repair)

KHRAPAL', A.A.

KHRAPAL', A.A. Sel'skoe khoziaistvo Aziatskogo Severa. Leningrad, Glavsevmorput', 1940. 131 p. DA

SO: LC, Soviet Geography, Part I, 1951, Uncl.

KHRAFALI, A. A.

PA 33/4974

USSR/Agronomy

Bibliography

Jul 48

"Eighth Grand Assembly of the Commission of the Far Northern All-Union Academy of Agricultural Sciences Imeni V. I. Lenin," A. A. Khrafali, Cand Agr Sci, 2 pp

"Dok v-s Ak Selkhoz Nauk" No 7

Session convened in late Feb 48 was attended by representatives of far northern regions. All reports submitted were on achievements of agricultural science in regions where weather and climate are great obstacles. Delegates

33/4974

USSR/Agronomy (Contd)

Jul 48

recommended measures which should be adopted by scientific research institutes to aid the polar farmer.

33/4974

1. KHRAPAL', A. A.
2. USSR (600)
4. Geology and Geography
7. Transformation of Nature, Steppe and Forest Steppes, V. L. Kotel'nikov.  
(Moscow, Geography Press, 1949) Reviewed by A. A. Khrapal', Sov. Kniga,  
No. 12, 1949.

9. FDD Report U-3081, 16 Jan. 1953. Unclassified.



1ST AND 2ND ORDERS		PROCESSES AND PROPERTIES INDEX	
<p><i>ca</i></p> <p>Synthesis in the benzothiazole derivative series. A. I. Kirilov and G. V. Kirilov: <i>Uchenye Zapiski Khim. Sov. Unio.</i> 1969, No. 19, 205-11; <i>Khim. Refert. Zhur.</i> 4, No. 9, 69(1941).—A no. of deriva., including 2 monometh- imercyanine, were obtained in caps. whose purpose was to study the acetylated deriva. of 2-mercapto-4-amino- benzothiazole as photographic stabilizers. 2-Mercapto- thiazole was used as the initial substance. A detailed chain of the successive transformations and details of the synthesis are given. The following substances were ob- tained and described: 2-mercapto-4-aminothiazole, m. 264-5°; 2-mercapto-4-acetamidobenzothiazole, m. 148-5°; 2-methylmercapto-6-acetamidobenzothiazole, m. 148-7°; 2-mercapto-6-benzamidobenzothiazole, yellow crystals, m. 231-4°; 2-methylmercapto-4-benzamido- benzothiazole, m. 189-7°; (2-mercapto-4-benz- (thiazolyl)urea, m. 240° (decomp.); 1,3-bis(2-mercapto-4-benz- (thiazolyl)urea, m. 204-6°; 2-methylmercapto-4-amino- benzothiazole, m. 110-11°; (2-methylmercapto-4-benz- (thiazolyl)urea, m. 190-6°; 1,3-bis(2-methylmercapto-4- benzothiazolyl)thiourea, m. 228-60°; (2-methylmercapto-4- benzothiazolyl)thiourea, m. 193-4° (decomp.); (3- ethyl-6-acetamido-2-benzothiazole)(3-ethyl-2-benzo- thiazole)methinecyanine iodide, m. 205° (decomp.), max. of absorption 437 mμ; (3-ethyl-4-benzamido-2-benzo- thiazole)(3-ethyl-2-benzothiazole)methinecyanine iodide, m. 203° (decomp.), max. of absorption 436 mμ, crystal- lizes with 3 H<sub>2</sub>O. A similar phenomenon is observed for thiocarbonylanines with substituting R<sub>2</sub>NH groups.</p> <p>W. R. Henn</p>		<p>10</p>	
<p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>		<p>8-ETT-1245</p>	



Khrapal, G.V.

Synthesis of some derivatives of  $\beta$ -phenylisopropylamine.  
 I. Reaction of symmetric dihaloalkanes with  $\beta$ -phenylisopropylamine. G. I. Kiprianov and B. E. Krenkel. *Ukrain. Khim. Zhur.* 16, No. 6, 626-6 (1950) (in Russian).—Heating 5 g. ( $\text{CH}_2\text{Br}$ )<sub>2</sub> with 35 g.  $\text{PhCH}_2\text{CHMeNH}_2$  (I) 5 hrs. at 130° gave 7.4 g. ( $\text{CH}_2\text{NHCHMeCH}_2\text{Ph}$ )<sub>2</sub>, b<sub>p</sub> 195–200°; di-HCl salt, m. 272–4°. Heating 37.5 g. I with 17 g. ( $\text{CMe}_2\text{Br}$ )<sub>2</sub> 6 hrs. on a steam bath gave 5.6 g.  $\text{PhCH}_2\text{CHMeNHCHMeCMe}_2$ , b<sub>p</sub> 135–43°; HCl salt, m. 173–4°; the free amine with Br yields a product m. 120–1°. Heating 67.5 g. I with 12 g. 1,2-dibromocyclohexane 7 hrs. at 100° and 4 hrs. at 120° gave 7.2 g. *N*-(1-(or 2)-cyclohexen-1-yl)-2-phenylisopropylamine, b<sub>p</sub> 130–5°; HCl salt, m. 184–9°. ( $\text{CH}_3\text{CH}_2\text{Br}$ )<sub>2</sub> (10.1 g.) and 67.5 g. I kept 24 hrs. at room temp. gave 10 g. 1,3-bis(2-phenylisopropylamino)propane, b<sub>p</sub> 200–5°; di-HCl salt, m. 238–9°. Similarly ( $\text{CH}_3\text{CH}_2\text{Br}$ )<sub>2</sub> gave 94% 1-(2-phenylisopropyl)pyrrolidine, b<sub>p</sub> 117–23°; HCl salt, m. 136–8°. ( $\text{CH}_3\text{CH}_2\text{Br}$ )<sub>2</sub> gave 62% 1-(2-phenylisopropyl)piperidine, b<sub>p</sub> 115–17°; HCl salt, m. 215–16°. ( $\text{CH}_3\text{CH}_2\text{Br}$ )<sub>2</sub> and I kept 24 hrs. at room temp. gave 58% 1,5-bis(2-phenylisopropylamino)hexane, b<sub>p</sub> 221°; picrate, m. 183–4°; di-HCl salt, m. 253–4°. II. Reaction of  $\beta$ -phenylisopropylamine with  $\alpha$ -oxides. G. I. Kiprianov and G. V. Khrapal. *Ibid.* 627–31 (1950) (in Russian).—Heating 10.5 g. ethylene oxide with 32 g.  $\text{PhCH}_2\text{CHMeNH}_2$  (I) in a sealed tube 10 hrs. at 100° gave 25 g. *N*-(2-hydroxyethyl)-2-phenylisopropylamine, b<sub>p</sub> 117–21°; sulfate, m. 200–5°; HCl salt, m. 111–13°. Propylene oxide similarly treated gave 66.5% *N*-(2-hydroxypropyl) homolog, b<sub>p</sub> 122–6°, crystg. on standing and m. 63–4°; HCl salt, m. 144–6°. The residual liquid portion of the product gave a HCl salt, m. 142–5°, which mixed with the previous HCl salt, m. 122–9°, indicating different stereoisomeric forms.  $\text{PhCH}_2\text{CH}_2\text{O}$  and I similarly gave

57.4% *N*-(2-hydroxybutyl) compd., b<sub>p</sub> 130–3°; HCl salt, m. 115–30°. Cyclohexene oxide and I after 70 hrs. at 110–60° gave 91% *N*-(2-hydroxycyclohexyl) analog, b<sub>p</sub> 148–53°; HCl salt, m. 193–7°. Glycidol and I after 2 hrs. at 160° gave 85%  $\text{PhCH}_2\text{CHMeNHCH}_2\text{CH(OH)CH}_2\text{OH}$ , b<sub>p</sub> 169–70°; HCl salt, viscous mass. III. Reaction of  $\beta$ -phenylisopropylamine with 1,3-dibromopropanol. G. I. Kiprianov and G. V. Khrapal. *Ibid.* 632–8 (1950) (in Russian).—110- $\text{CH}(\text{CH}_2\text{Br})_2$  (I) (8.7 g.) was added with ice cooling to 20 g.  $\text{PhCH}_2\text{CHMeNH}_2$ , the mixt. cooled 1 hr., kept 2 hrs. at room temp., acidified with HCl, extd. with  $\text{Et}_2\text{O}$ , and the acid soln. made alk. with NaOH and extd. with  $\text{Et}_2\text{O}$ , yielding 47.5% *N*-epoxypallyl-2-phenylisopropylamine (II), b<sub>p</sub> 143–5°, and 20.2% 1,3-bis(2-phenylisopropylamino)-2-propanol (III), b<sub>p</sub> 215–20°. II solidified on standing and m. 81–3°; HCl salt, m. 107–8.6°. III gave a nitrate, m. 170–1° (from  $\text{H}_2\text{O}$ ), m. 166–7° (from  $\text{EtOH}$ ); di-HCl salt, m. 247–50° (pure), m. 220–32° (crude). The yield of III can be raised by increasing the proportion of I in the synthesis. Keeping 4.11 g. epibromohydrin and 12.25 g. I 1 hr. gave 24.4% II and 47% III. Heating 2.6 g. II with 1.81 g. I 3 hrs. at 130–40° led to no reaction; at 175–85° 61% III was formed. II heated with 40% aq. MeNH<sub>2</sub> in sealed tube 6 hrs. at 170–80° gave 67.5% 1-methylamino-3-(2-phenylisopropylamino)-2-propanol, b<sub>p</sub> 168–60°; di-HCl salt, m. 235.5–6.5°. II heated with excess  $\text{EtNH}_2$  5 hrs. at 170–80° gave 73.8% 1-diethylamino-3-(2-phenylisopropylamino)-2-propanol (IV), b<sub>p</sub> 165–60°; HCl salt and sulfate; oxalate, m. 145–7°. *N*-Epoxypallyldiethylamine heated with excess I 9 hrs. at 175–85° gave 68% IV. G. I. Kiprianov

1. KIPRYANO, G.I.; KHRAPAL', G.V.
2. USSR (600)
4. Amines
7. Synthesis of some derivatives of  $\alpha$ -phenylisopropylamine with  $\alpha$  - oxides, G.I. Kipryanov, G.V. Khrapal', Ukr.khim.zhur. 16 no. 6, 1951.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Unclassified.

1. KIPRYANOV, G. I.; KHRAPAL', G. V.
2. USSR (600)
4. Oxides
7. Synthesis of some derivatives of  $\beta$ -phenylisopropylamine. Part 2. Reaction of  $\beta$ -phenylisopropylamine with  $\alpha$ -oxides. Ukr. khim. zhur. 16, No. 6, 1951.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

1. KIPRIANOV, G. I.; KHRAPAL', G. V.
2. USSR. (600)
4. Propanol
7. Synthesis of some derivatives of  $\beta$ -phenylisopropylamine. Part 3. Reaction of  $\beta$ -phenylisopropylamine with 1, 3-dibromopropanol, Ukr. khim. zhur., 16, no. 6, 1951.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

~~KIPRIANOV, G.V.~~

KIPRIANOV, G.I.; KHRAPAL', G.V.

Synthesis of certain derivatives of  $\beta$ -phenylisopropyl-amine. Part 5.  $N$  -  $\beta$ -chloroethyl and  $N$  -  $\beta$ -dimethyl-aminoethyl derivatives. Uk.rkhim.shur. 20 no.1:53-56 '54.

(MLRA 7:3)

1. Ukrainskiy institut eksperimental'noy endokrinologii, g. Khar'kov.  
(Amines)

KHRA Pay, V.P.

18(6) PHASE I BOOK EXPLOITATION SOV/3199

Akademiya nauk SSSR. Institut obshchey i neorganicheskoy khimii  
Im. M. S. Rumakova

Analiz blagorodnykh metallov (Analysis of Noble Metals) Moscow,  
1959. 193 p. Errata slip inserted. 2,700 copies printed.

Resp. Ed.: M. K. Pashitsyn, USSR Academy of Sciences, Corre-  
sponding Member, and O. Ye. Zvyagintsev, Doctor of Chemical  
Sciences; Ed.: I. M. Guseva.

PURPOSE: This collection of articles is for scientists engaged  
in the study and analysis of the noble metals.

CONTENTS: This is a collection of articles on the analysis of the  
noble metals. It includes studies carried out by the Institute  
of General and Inorganic Chemistry in Moscow (AN SSSR),  
as well as reports presented by scientists of research organizations  
and by industrial enterprises at the Third and Fourth Conference  
on Noble Metals held in 1954 and 1957, respectively. The  
studies and reports describe new organic reagents for gravi-  
metric determination of platinum, palladium, and physicochemical  
methods of analysis (spectrophotometric, polarographic and  
potentiometric). Special attention is given to spectral  
analysis for the determination of admixtures in alloys of  
platinum, silver, and gold, as well as in refined noble  
metals. The collection also includes analytical methods, tables  
and charts for materials containing metals of the platinum  
group, as well as a review of the literature on the analysis  
of platinum metals published in the last five years. NO  
personalities are mentioned. References follow each chapter.

Pashitsyn, M. K., K. A. Gladyshevskaya and L. M. Rumakova.  
Use of the Ion Exchange Method in the Analysis of Platinum  
Metals. Report 2. Separation of Rhodium from Iridium 103

Adams, J. M., Ye. I. Sivikina and V. M. Alyanchikova.  
Method of Preparing Poor Industrial Solutions and Obtaining  
From Them Concentrated Substances for the Determination of  
Platinum Metals by Spectral Analysis 115

Baranov, V. P. Spectral Method for the Determination of  
Platinum, Palladium, and Tellurium in Silver-gold Alloys 128

Pashitsyn, M. K. and A. D. Gutina. Spectral Method of  
Analysis for Refined Iridium and Ruthenium 133

Eurasov, A. A., M. P. Bukachev and M. M. Shvrideva. Spectral  
Determination of Mixtures in Gold, Silver and Alloys 139

Eurasov, A. A. Spectral Analysis of Platinum Alloys Con-  
taining Three Components 143

Adzhonovskiy, A. P. and V. M. Karbolin. Determining the  
Chemical Composition of Binary Alloys by the Thermoelectro-  
motive Force 145

Arlov, V. B. Effect of Complexation and of the Acid-  
Kremly Balance in the Medium on the Potential of the  
Au<sup>III</sup>/Au<sup>0</sup>, Au<sup>I</sup>/Au<sup>0</sup>, Au<sup>III</sup>/Au<sup>I</sup>, and Ag<sup>I</sup>/Ag<sup>0</sup> Systems 150

Arlov, V. B. and V. Y. Kosova. Chromatometric Determination  
of Gold 156

Anisimov, S. M., V. M. Kuznetsov and V. P. Tsvetkov.  
Electrode Method for the Determination of Silver in  
Silver and Lead Alloys Containing Platinum Metals 163

Tufa, T. P. and M. A. Gantseva. Dissolving Platinum  
Metals and Their Alloys With the Aid of an Alternating  
Current 176

Gantseva, M. A., T. P. Tufa and V. G. Laviana. New  
Method for the Analysis of Palladium-silver Alloys 181

Rumakova, M. S. and K. E. Shelnina. Methods of Testing  
Platinum Alloys and Their Products on a Touchstone  
and by Chemical Means 189

KHRAPAY, V. P. (NOVOSIBIRSK)

"Methods of Spectral Analysis in the Determination of Impurities in High-Purity Gold"

paper submitted to the Fifth Conference on the Analysis of Nobel Metals, Novosibirsk, 20-23 September 1960

So: Zhurnal analiticheskoy khimii, Vol XVI, No. 1, 1961, page 119

ACCESSION NR: AT4016490

S/2582/63/000/010/0165/0177

AUTHOR: Khrapchenko, V. M. (Moscow)

TITLE: Estimating the error in binary multiplication

SOURCE: Problemy kibernetiki, no. 10, 1963, 165-177

TOPIC TAGS: computer programming, error estimation, multiplication, binary multiplication, rounding off

ABSTRACT: The author notes that after an arithmetic operation has been performed on digital computers the result is normally rounded off. The magnitude of the resultant error must be taken into account when determining the necessary number of places for the representation of numbers in the machine. Generally speaking, estimation of errors in addition and subtraction offers no particular difficulties; the error in the product of two  $n$ -place numbers is also calculated with relative ease in the event that the rounding-off operation is carried out after all  $2n$  significant digits of the product have been obtained. However, a number of methods of multiplication can be performed in a more economical fashion if there is a preliminary rounding-off of each product of the multiplicand and the multiplier digit. In the present article, an estimate is given of the binary multiplication error which arises in the event of this kind of rounding off-operation. The author pre-



ACCESSION NR: AT4016490

sents 2 theorems and 7 lemma in a determination of the maximum and minimum values of  $\delta$ . The problem of determining the required amount of additional places  $p$  for a given error in multiplication is also analyzed. Orig. art. has: 32 formulas and 1 table.

ASSOCIATION: none

SUBMITTED: 05Jul62

ENCL: 00

SUB CODE: DP

NO REF SOV: 001

OTHER: 000

Card 2/2

16,6700

S/020/63/148/002/014/037  
B125/B112

AUTHOR: Khrapchenko, V. M.

TITLE: A method for the conversion of a multi-row into a single-row code

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 2, 1963, 296-299

TEXT: A method is described for the fast conversion of an m-row code

$C = \sum_{j=1}^m A_j$  into a single-row code. Let the summands  $A_j (1 \leq j \leq m)$  be represented in a positional calculation system with the constant weight

$A_j = \sum_{i=1}^n a_{ji} r^{-i}$ , where n is the number of the order of  $A_j$ . The integer r is the basis of the system of counting applied ( $r \geq 2$ ), and  $a_{ji}$  is one of the numbers  $0, 1, \dots, r-1$ ;  $a'_{j,i}$  equals  $b_{j,(i'-(m'-j'))}$  for  $1 \leq i'-(m'-j') \leq n$  and 0 for all other cases.

Card 1/3

A method for the conversion of a ...

S/020/63/148/002/014/037  
B125/B112

$$C = \sum_{r=1}^{m'} A'_r,$$

$$A'_r = r^{m'-1} \sum_{l=1}^{n+m'-1} a'_{rl} r^{-l},$$

(8)

$\sqrt{A}$

is derived for the number C in the  $m'$ -row code. The number of rows in the code is reduced to two by repeated application of such steps. The two-row code is then converted into a single-row code by a parallel  $(n+m')$  digit summator. The optimum code conversion circuit of the computer can be chosen freely if the number  $m_k$  of the rows in the code (after the  $k$ -th step of conversion) is divided into  $p_k$  groups each of which has  $u_k$  summands, and into a residual group with  $v_k$  summands, according to  $m_k = p_k u_k + v_k$  ( $0 \leq v_k < u_k$ ). The number of rows in these ...

Card 2/3

A method for the conversion of a ...

S/020/63/148/002/014/037  
B125/B112

groups is reduced to two, and then to one by a summator. In this variant no more than  $(m-2)/(u-u')$  blocs are required, for a  $u'$ -row sum of  $u$  single-row summands, no more than  $s$  less complex blocs and a one-bit summator are required. Multiplying speed may be tripled or quadrupled by the above method. There are 1 figure and 1 table.

ASSOCIATION: Institut elektronnykh upravlyayushchikh mashin Akademii nauk SSSR (Institute of Electronic Controlling Engines of the Academy of Sciences USSR) ✓A

PRESENTED: July 12, 1962, by A. I. Berg, Academician

SUBMITTED: July 12, 1962

Card 3/3

8/799/62/000/003/001/008

**AUTHOR:** Khrapchenko, V.M.

**TITLE:** On the synthesis of networks for the modeling of a disjunctive normal form.

**SOURCE:** Akademiya nauk SSSR. Institut elektronnykh upravlyayushchikh mashin. Taifrovaya tekhnika i vychislitel'nyye ustroystva. no.3. 1962, 3-13.

**TEXT:** The problem of designing a minimal circuit of the "and-or" type to realize certain algebraic-logic functions is reduced in this survey paper to its simplification by means of a disjunctive normal form (DNF). A great number of methods for the construction of a minimal DNF exists. The practically most significant results obtained by a number of authors in this direction are selected. They have been reduced to a unitary method for the design of a minimal DNF, which is illustrated on the example of the design of a diode circuit. The example employed in the discussion is an arbitrary two-stage diode circuit of the "and-or" type. Here different variables and their inversions are placed into correspondence to the various input signals of the circuit; it is assumed that an elevated signal level has a corresponding variable or its inversion equal to "1" and a low level equal to "0". Each group of diodes that form an "and" subcircuit will be juxtaposed to a conjunction of variables and their inversions that correspond to the input signal of the diodes of  
Card 1/2

On the synthesis of networks for the modeling ....

S/799/62/000/003/001/008

that group; the entire DNF circuit, consisting of the conjunctions, will correspond to its subcircuits. Obviously, between the "and-or" circuits and the DNF's, a mutually single-valued correspondence is established, which exhibits the following property: The level of the output signal of the circuit corresponds mutually single-valuedly to the value of the function determined by the DNF in the set of the values of the variables that correspond to the levels of the input signals. As an example, a certain algebraic logic function, that depends on 3 variables, is assumed as given. One of the DNF's of this function and its corresponding circuit are schematically drawn. The reasonings derived from this example are developed into the above-defined unitary design method. There are 1 figure, 6 tables, and 12 references (5 Russian-language Soviet and 7 English-language, of which 1 in Russian translation).

Card 2/2

L 07925-67 EWT(m)/ENP(t)/ETI LJP(c) JD

ACC NR: AP6033385

SOURCE CODE: UR/0075/66/021/008/0980/0984

AUTHOR: Grushina, N. V.; Tsevan, V. I.; Khrapchenkova, G. V.;  
Yerdenbayeva, M. I.; Kozin, L. F.

ORG: Institute of Chemical Sciences, AN KazSSR, Alma-Ata (Institut khimicheskikh nauk AN KazSSR)

TITLE: Determination of impurities in high-purity cadmium

SOURCE: Zhurnal analiticheskoy khimii, v. 21, no. 8, 1966, 980-984

TOPIC TAGS: cadmium, cadmium metal, impurity determination, high purity cadmium, cadmium nitrate

ABSTRACT: A method has been developed for the spectrochemical determination of  $10^{-4}$ — $10^{-6}\%$  impurities in cadmium after their concentration by coprecipitation with cadmium diethyldithiocarbamate. The method was applied to the analysis of high-purity cadmium metal and cadmium nitrate. The relative experimental error is  $\pm 25\%$ . Orig. art. has: 2 figures and 3 tables. [Authors' abstract]

SUB CODE: 07/ SUBM DATE: 23Nov64/ ORIG REF: 007/ OTH REF: 001/

Card 1/1

vmb

kh. apin, T.M.  
~~KHRAPIN, T.M.~~

Oscillators instead of buzzers, Avtom., telem. i sviaz' 2 no.1:34  
Ja '58. (MIRA 11:1)

1. Starshiy elektromekhanik Grebenkovskoy distantzii Yuzhnoy dorogi.  
(Oscillators, Electron-tube) (Railroad--Telephone)



KHRAPIN, T.M.

Rectifier for intrastation communications. Avtom., telem. i svyaz'  
2 no.6:34 Je '58. (MIRA 11:6)

1. Starshiy elektromekhanik Grebenkovskoy distantzii signalizatsii  
i svyazi Yuzhnoy dorogi.  
(Railroads—Communication systems—Equipment and supplies)

1ST AND 2ND CODES										3RD AND 4TH CODES									
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z										A B C D E F G H I J K L M N O P Q R S T U V W X Y Z									
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100										1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100									

**KHRAPKIN, M. A.**

*Ca*

**Charge make-up of the eastern by-product coke plants.**  
**N. S. Gryaznov and M. A. Khrapkin. *Stal* 7, 773-81**  
**(1947).—An investigation was carried out for the purpose**  
**of simplifying the compn. of coking charges and to adapt**  
**coals hitherto not used for coking as substitutes for high-**  
**grade coking coals. The coke from the new charges was**  
**satisfactory for metallurgical use. M. Hosh**

*21*

1ST AND 2ND CODES										3RD AND 4TH CODES									
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z										A B C D E F G H I J K L M N O P Q R S T U V W X Y Z									
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100										1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100									

KHRAPEIN, M. A.

FA 24T33

USSR/Engineering  
Coke Plants  
Fuels, Solid

Sep 1947

"Construction of Mixing Sheds at Eastern By-product Coke Factories," M. S. Gryaznov,  
Candidate in Technical Sciences, M. A. Khrapkin, Engr, Eastern By-product Coke  
Institute, Main Coke Administration, 8<sup>1</sup>/<sub>2</sub> pp

"Stal'" No 9

In accordance with the agreements of the All-Union Technical Conference on Coke in 1946, there has been much work on the reconstruction of eastern by-product coke factories and plants. This has decreased the number of components in the mixing sheds, led to the use of several new types of coal for making coke and increased the use of low-grade coke coal (particularly bituminous, gaseous, K Zh). The result was a standardization of mixing with a resultant standardization of the quality of coke. Well-illustrated with diagrams.

FA 24T33

KHRAPKIN, M.A., inzh.

Comparable technical and economic indices of the operations of  
coal preparation plants. Ugol' 36 no.11:42-44 N '61. (MIRA 14:11)  
(Coal preparation plants)

A M KHRAPKO and V F RULEV

"Development of a Device for Measuring the Degree of Coupling in  
Magnetrons" from Annotations of Works Completed in 1955 at the State Union Sci.  
Res. Inst; Min. of Radio Engineering Ind.

So: B-3,980,964

S/107/61/000/005/003/004  
E192/E382


AUTHORS: Rasskazikhina, N. and Khrapko, R., Engineers

TITLE: An Underwater Communications Device ("Walkie-talkie")

PERIODICAL: Radio, 1961, No. 5, pp. 26 - 27

TEXT: The system described is an independent communications device whose weight, together with supply sources, is about 1 kg. The equipment can be used for voice-communications (talking) under water and consists of a throat microphone, a low-frequency amplifier based on transistors, an underwater loudspeaker and a supply source. Since a throat microphone is used in this equipment, it can be employed by divers provided with aqualungs or oxygen cylinders. The supply source is provided by 8 or 10 pocket-lamp batteries (type KBC-J-0.5 (KBS-L-0.5)). The useful life of a set of such batteries is 30 - 50 min (continuous). The amplifier is shown in Fig. 1, where the first stage is an emitter-follower which provides a matching buffer between the microphone and the input of the amplifier proper. The second stage is the first

Card 1/3



An Underwater Communications ....

S/107/61/000/005/003/004

E192/E382

amplifier with a transformer load; this is followed by the output stage, based on 2 transistors, type П4Б (P4V), which operate in push-pull without an output transformer. The coil of the loudspeaker, with a resistance of  $5\Omega$ , is the load to the output amplifier. The output power of the amplifier is 25 W, its efficiency being about 75%. The underwater loudspeaker is based on a dynamic loudspeaker, type 2ГД-3 (2GD-3) (Fig. 2). The magnetic system 1 of the speaker is covered by a duralumin ring 2, which supports a diaphragm made of celluloid, 0.3 - 0.5 mm thick. The diaphragm is fixed by another ring 4, which is screwed onto the top of the first ring. The coil of the loudspeaker is fixed to a diaphragm and its terminals are taken through small apertures in the diaphragm which are hermetically sealed. The equipment is switched off by means of the key  $K_1$ , which is sealed inside a small rubber bag. There are 2 figures.

Card 2/3

KHRAPKO, R.I.

Uniqueness of a centrally symmetrical gravitational field  
in a vacuum. Zhur.eksp. i teor.fiz. 49 no.6:1884-1886  
D '65. (MIRA 19:1)

1. Moskovskiy aviatsionnyy institut. Submitted July 5, 1965.



11323  
S/057/62/032/009/006/014  
B163/B186

17

76.1410  
AUTHOR: Khrapko, R. I.

TITLE: Stationary quasi-onedimensional magneto-gasodynamic flow  
at finite conductivity

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 32, no. 9, 1962, 1063-1071

TEXT: In order to study transitions from subsonic to supersonic flow patterns a system of 9 equations is set up for the stationary quasi-onedimensional movement of an ideal gas of constant finite conductivity  $\sigma$  in a plane tube. The gas moves in x-direction, an electric field is applied in y-direction, and an external magnetic field (not necessarily homogeneous) is so directed that its z component is large compared with its x and y components. The system of 9 equations contains the dependencies of the following 11 functions on the x coordinate: Electric field strength  $E_y$ , tube width A in y direction, electric current component  $j_y$ , gas velocity  $v_x$ , density  $\rho$ , pressure p, enthalpy w, velocity of sound a, total magnetic field component  $H_z$ , external magnetic field component  $H_z^e$ .

Card 1/2

Stationary quasi-onedimensional...

S/057/62/032/009/006/014  
B163/B186

external field gradient  $\partial H_x^e / \partial z$ . Thus two additional conditions may be stipulated arbitrarily in order to treat special cases. The following cases are discussed: 1)  $A$  and  $H_z$  are constant. 2)  $A$  and the Mach number  $v/a$  are constant. 3)  $A$  and  $H_z v / E_y$  are constant. 4)  $A$  is constant, and  $\partial H_x^e / \partial z$  vanishes. 5)  $\partial H_x^e / \partial z$  vanishes, and  $a$  is constant. It is shown how the system of equations can be generalized for the case where the conductivity also is variable. There are 3 figures. *M. F. Shiryakov*  
*... thanked for valuable discussions...*

SUBMITTED: June 12, 1961 (initially)  
December 18, 1961 (after revision)

Card 2/2

L 32628-66 EWT(1) IJP(c) WW/GG

ACC NR: AP6014037

SOURCE CODE: UR/0056/66/050/004/0971/0974

58  
56  
B

AUTHOR: Khrapko, R. I.

ORG: Moscow Aviation Institute (Moskovskiy aviatsionnyy institut)

TITLE: Propagation of light through a singular Schwarzschild sphere

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 50, no. 4, 1966, 971-974

TOPIC TAGS: cosmogony, light velocity, gravitation effect, general relativity theory, Doppler effect

ABSTRACT: The problem of propagation of light from an emitting surface of a gravitating sphere expanding with parabolic velocity from within its own singular sphere, in other words, how can an external observer see this surface, is solved in the present paper in a coordinate system with a metric

$$ds^2 = -\frac{r-1}{r} dt^2 + \frac{r}{r-1} dr^2 + r^2(d\theta^2 + \sin^2\theta d\varphi^2). \quad (1)$$

To overcome the difficulty encountered in identifying parts of a geodesic which are separated by the singular sphere, the equation of the geodesic on one side of the singular sphere is regarded as the analytic continuation of this equation on the other side of the singular sphere. The equation of the world line of an emitter located on the surface of such a sphere is obtained by fixing the Lemaitre radio coordinate in the equation that gives the transition from the Schwarzschild system to the Lemaitre

Card 1/2

L 32628-66

ACC NR: AP6014037

system. Allowance is made for the Doppler shift of the frequency of light. Equations are derived which give the complete evolution of the picture seen by the observer, with the exception of the intensity. It is shown that the frequency ratio of the light at the edge of the disc and at the point of observation decreases monotonically from infinity (at the instant of the first flash). The frequency ratio of the light emitted by the luminous sphere as it passes through the singular sphere and received by a very distant observer is equal to 2. The light received by such an observer from the edge of the disc has its natural color at all times. The author thanks Professor M. F. Shirokov and V. Babetskiy for fruitful discussions. Orig. art. has: 1 figure and 8 formulas. 2

SUB CODE: 20, 03/ SUBM DATE: 11Oct65/ ORIG REF: 004/ OTH REF: 002

Card

2/2